

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A process for the production of a smoke product, said smoke product being obtained by pyrolysis of an organic material, wherein said process comprises the steps of:

- introducing said organic material to be pyrolyzed in a pyrolysis reactor comprising a substantially hermetically sealed heatable chamber containing at least one rotatable heated endless screw, wherein said heated rotatable screw comprises a heating ~~power sufficient to supply device that~~ supplies calories ~~necessary~~ to elevate the temperature of the organic material, said material being introduced at one end of said at least one screw,
- heating said organic material in said chamber to a temperature ~~comprised~~ between 300°C and 400°C ~~so as to effect pyrolysis during its movement,~~ to pyrolyze said organic material and said organic material moves through said heatable chamber under the influence of rotation of said at least one screw, and

- removing the consumed organic material and recovering the produced smoke from the other end of said at least one screw.

2. (currently amended) The process according to claim 1, wherein the organic material is ~~dried by preheating~~ preheated before being pyrolyzed.

3. (canceled)

4. (currently amended) The process according to claim 1, wherein the produced smoke is condensed at the outlet of the reactor in a ~~suitable~~ condensation device.

5. (previously presented) The process according to claim 1, wherein at least one portion of the pyrolysis gas present at the outlet of the condensation device is re-injected into the reactor.

6. (previously presented) The process according to claim 1, wherein the pyrolysis takes place under precise control, to about 0.1%, of the volume content of oxygen in the reactor.

7. (previously presented) The process according to claim 1, wherein the pyrolysis takes place under precise control,

to about one degree Celsius, of the temperature prevailing in said reactor.

8. (previously presented) The process according to claim 1, wherein the pyrolyzed organic material is essentially constituted by wood chips.

9. (previously presented) The process according to claim 1, wherein the pyrolyzed organic material is essentially constituted by fibers or chips of at least one substance selected from the group consisting of wood, cellulose, any other polysaccharide and lignocellulose complex.

10. (currently amended) A method of producing a smoke product, comprising operating a pyrolysis reactor by the process according to claim 1 to produce a smoke product, said pyrolysis reactor comprising ~~essentially~~ a substantially hermetically sealed heatable chamber containing at least one rotatable endless screw comprising a heating device that heats said screw heated by the Joule effect, ~~said at least one screw for receiving an organic material to be pyrolyzed, for the production of a smoke product.~~

11. (previously presented) The method according to claim 10, wherein the product is of liquid smoke.

12. (previously presented) The method according to claim 10, wherein the product is of wood charcoal.

13. (previously presented) Liquid smoke product, obtained by the process according to claim 1, wherein said liquid smoke comprises a volume content of benzopyrene of at most 10 ppb and a volume content of benzoanthracene of at most 20 ppb.

14. (original) Liquid smoke obtained by condensation of smoke according to claim 13.

15. (previously presented) Foodstuff smoked with the smoke according to claim 13.

16. (canceled)

17. (currently amended) A process for the production of a smoke product by pyrolysis of an organic material, comprising:

- introducing said organic material to be pyrolyzed in a pyrolysis reactor comprising a substantially hermetically sealed heatable chamber containing at least one rotatable heated endless screw, wherein said rotatable heated endless screw comprises a heating ~~power sufficient to~~ device that supplies calories to elevate the temperature of the organic

material to 300°C to 380°C, said material being introduced at one end of said screw,

- heating said organic material with said at least one rotatable heated endless screw in said chamber at a temperature of 300°C to 380°C ~~so as to effect pyrolysis during its movement,~~ to pyrolyze said organic material and said organic material moves through said heatable chamber under the influence of rotation of said at least one screw, and
- removing the consumed organic material and recovering the produced smoke from the other end of said at least one screw.

18. (currently amended) A process for the production of a smoke product obtained by pyrolysis of an organic material, wherein said process comprises the steps of:

- introducing said organic material to be pyrolyzed at one end of at least one rotatable heated endless screw, wherein said at least one rotatable heated endless screw is in a substantially hermetically sealed heatable chamber of a pyrolysis reactor, and wherein said rotatable heated endless screw comprises an electrical heating power ~~sufficient to elevate the temperature of the organic material to~~ power that passes electric current through the rotatable heated endless screw to heat the organic material

to 300°C to 400°C that heats said organic material 300°C to 400°C,

- heating said organic material with said rotatable heated endless screw in said chamber at a temperature of 300°C to 400°C ~~so as to effect pyrolysis during its movement,~~ to pyrolyze said organic material and said organic material moves through said heatable chamber under the influence of rotation of said at least one screw, and
- removing the consumed organic material and recovering the produced smoke from the other end of said at least one screw.

19. (new) A process for the production of a smoke product obtained by pyrolysis of an organic material, wherein said process comprises the steps of:

- introducing said organic material to be pyrolyzed at one end of at least one rotatable heated endless screw, wherein said at least one rotatable heated endless screw is in a substantially hermetically sealed heatable chamber of a pyrolysis reactor, and wherein said rotatable heated endless screw comprises an electrical heating device that passes electric current through the rotatable heated endless screw to heat the organic material to 300°C to 400°C,
- heating said organic material with said rotatable heated endless screw in said chamber at a temperature of 300°C to pyrolyze said organic material as said organic material

moves through substantially hermetically sealed heatable chamber under the influence of rotation of said at least one screw,

- recovering a smoke product from the pyrolyzed organic material, wherein said smoke product is a liquid smoke comprising a volume content of benzopyrene of at most 10 ppb and a volume content of benzoanthracene of at most 20 ppb, and
- removing the consumed organic material from the other end of said at least one screw.

20. (new) The process according to claim 19, wherein the organic material is dried by preheating before being pyrolyzed.

21. (new) The process according to claim 19, wherein the produced smoke is condensed at the outlet of the reactor in a suitable condensation device.

22. (new) The process according to claim 19, wherein at least one portion of the pyrolysis gas present at the outlet of the condensation device is re-injected into the reactor.

23. (new) The process according to claim 19, wherein the pyrolysis takes place under precise control, to about 0.1%, of the volume content of oxygen in the reactor.

24. (new) The process according to claim 19, wherein the organic material is wood chips.